

ABSTRACT

An image reconstruction area of a subject is divided into a plurality of image data segments, among projection data obtained by projection, projection data segments necessary for back projection processing are cut out for every image data segments and back projection processing is performed for every image data segments by making use of the cut out projection data segments. Further, detector addresses of the projection data to be used for the back projection processing are obtained from a plurality of limited number of detector addresses within the concerned image data segment region. As a result, a device is realized which permits to produce a high quality tomographic image with high speed by using a small amount of a high speed memory.